Troubleshooting Message Waiting Indicators (MWIs)

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Troubleshooting Message Waiting Indicators (MWIs)

Triggers for Turning MWIs On and Off

An MWI is a lamp, flashing LCD panel, or special dial tone on user phones that lets users know a voice message is waiting. The type of indicator depends on the phone system and the user phones. Phone systems that support message counts may also display the number of messages that the user has.

MWIs are not the same as message notification, which is the feature that notifies a user of new voice messages by calling a phone, pager, or other device, or by sending an email message.

The following events trigger Unity Connection to turn MWIs on and off:

- When a message for a user arrives on the Unity Connection message store, Unity Connection notifies the phone system to turn on an MWI on the phone for that user.

Any message that arrives on the Unity Connection message store (for example, voice messages, emails, and faxes) trigger turning MWIs on and off.

- When the user saves or deletes a read message, Unity Connection notifies the phone system to turn off the MWI on the phone.
- When a user deletes a new message without listening to it, Unity Connection notifies the phone system to turn off the MWI on the phone.
- When MWIs are synchronized, Unity Connection queries the message store to determine the status of MWIs on all phones, and resets the applicable MWIs.

However, an MWI remains on under the following conditions:

- More messages are waiting to be heard. When all new messages are listened to, the MWI is turned off.
- A new message arrives while the user is listening to the original message. When all new messages are listened to, the MWI is turned off.

- The user listens on the phone to only part of the message, then either hangs up or skips to the next message before hearing the entire message.
- The user listens the entire message. You can perform either of the following to turn off the MWI:
  - Save or Delete the message after listening it.
  - In Cisco Unity Connection Administration, Select **Users**. On the Search Users page, Select the alias of the user. On the Edit User Basics page of the user, navigate Edit > Playback Message Settings. On the Playback Message Settings page, Select **Saved** under **When Disconnected or User Hangs Up During Message Playback** field.
- In an email application, in the Web Inbox, or Messaging Inbox , the user marks a listened-to message as unread.

Messages in an external message store do not trigger Unity Connection to turn MWIs on and off.

MWI Problems

See the following sections for information on troubleshooting problems with MWIs.

MWIs Do Not Turn On or Off

When MWIs do not turn on or off, use the following task list to determine the cause and to resolve the problem. Do the tasks in the order presented until the problem is resolved.

Following are the tasks to troubleshoot when MWIs do not turn on or off:

1. Run the Check Telephony Configuration test. See the "Running the Check Telephony Configuration Test" section on page 15-3.
2. Confirm that there are voice messaging ports for the phone system integration that are assigned to send MWI requests. To view the settings, in Cisco Unity Connection Administration, select **Telephony Integrations** > **Ports**.

Note PIMG/TIMG serial integrations do not send MWI requests through voice messaging ports.

3. Confirm that the voice messaging ports that are assigned to send MWI requests are enabled. To view the settings, in Cisco Unity Connection Administration, select **Telephony Integrations** > **Ports**.
4. Confirm that an adequate number of voice messaging ports for the phone system integration are assigned to send MWI requests. Otherwise, the ports may be too busy to dial out immediately to turn MWIs on and off. To view the ports, in Cisco Unity Connection Administration, select **Telephony Integrations** > **Ports**.
5. Confirm that the port groups for the phone system integration enable MWIs. To view the Enable Message Waiting Indicators check box, in Cisco Unity Connection Administration, select **Telephony Integrations** > **Port Group** > **Port Group Basics**.
6. *(Cisco Unified CM SCCP integrations only)* Confirm that the settings are correct for the MWI On Extension field and the MWI Off Extension field. To view the Cisco Unified CM settings, in Cisco Unified Communications Manager Administration, select **Voice Mail** > **Message Waiting**. To view

the Unity Connection settings, in Cisco Unity Connection Administration, select **Telephony Integrations** > **Port Group** > **Port Group Basics**.

7. *(PIMG/TIMG serial integrations only)* Confirm that a separate port group exists to send MWI requests to the master PIMG/TIMG unit. To view the port groups, in Connection Administration, select **Telephony Integrations** > **Port Group**. For details on the MWI port group, see the applicable Integration Guide for Cisco Unity Connection at http://www.cisco.com/en/US/products/ps6509/products_installation_and_configuration_guides_list.html.
8. Confirm that MWIs for the phone system are not forced off. To view the Force All MWIs Off for This Phone System check box, in Cisco Unity Connection Administration, select **Telephony Integrations** > **Phone System** > **Phone System Basics**.
9. Confirm that the MWI is enabled for the user. To view the Enabled check box, in Cisco Unity Connection Administration, select **Users** > **Users** > **Messaging Waiting Indicators**.
10. Confirm that the correct phone system is assigned to the MWI for the user. To view the Phone System field, in Cisco Unity Connection Administration, select **Users** > **Users** > **Messaging Waiting Indicators**.
11. *(Cisco Unified CM SCCP integrations only)* Confirm that the extensions that turn MWIs on and off are in the same calling search space that contains the phones and voicemail ports. From a phone, dial the extension that turns on the MWI. If you hear the reorder tone, the extension for turning on MWIs is not assigned to the correct calling search space in Cisco Unified CM Administration. If you do not hear the reorder tone, but the MWI is not turned on or off, a route plan may be causing the problem.

    To view the calling search space for the MWI extensions, in Cisco Unified CM Administration, select **Voice Mail > Message Waiting**.
12. *(Cisco Unified CM SCCP integrations only)* Confirm that the dial plan does not overlap with the MWI extensions. MWI extensions must be unique. To view the dial plan, in Cisco Unified CM Administration, select **Call Routing** > **Dial Plan Installer**.
13. *(PIMG/TIMG serial integrations only)* Confirm that the RS-232 serial cable is firmly seated in the serial port of the master PIMG/TIMG unit and in the serial port of the phone system.
14. Verify whether the Unity Connection server was upgraded, restored using the Disaster Recovery System, or experienced an event that disrupted MWI synchronization. See the "Synchronizing MWIs" section on page 15-3.
15. If the preceding tasks did not resolve the MWI problem, enable macro traces for MWIs. For detailed instructions on enabling the applicable traces and viewing the trace logs, see the Troubleshooting Cisco Unity Connection chapter.

Running the Check Telephony Configuration Test

Note The Check Telephony Configuration test does not test IPv6 connectivity. (IPv6 is supported in Unity Connection for Cisco Unified Communications Manager integrations.) The test confirms that Unity Connection can communicate with the phone system using IPv4 addressing.

Procedure

Procedure

Step 1 In Cisco Unity Connection Administration, in the Related Links list in the upper right corner of any Telephony Integrations page, select **Check Telephony Configuration** and select **Go**.

If the test is not successful, the Task Execution Results displays one or more messages with troubleshooting steps. After correcting the problems, run the test again.

Step 2 In the Task Execution Results window, select **Close**.

Synchronizing MWIs

We recommend resynchronizing MWIs for the system in the following circumstances:

- After a server is restored using the Disaster Recovery System.
- After upgrading a system.
- After a WAN outage in a system that has distributed voice messaging through Cisco Unified Survivable Remote Site Telephony (SRST) routers or Cisco Unified Communications Manager Express routers in SRST mode.

Synchronizing MWIs for a Phone System Integration

Procedure

Procedure

Step 1 In Cisco Unity Connection Administration, expand **Telephony Integrations** and select **Phone System**. On the Search Phone Systems page, select the name of the phone system for which you want to synchronize all MWIs.

Step 2 On the Phone System Basics page, under Message Waiting Indicators, select **Run**.

Note
Synchronizing MWIs for the phone system may affect system performance. We recommend that you do this task when phone traffic is light.

MWIs Turn On but Do Not Turn Off

Use the troubleshooting information in this section if MWIs turn on but do not turn off. See the following possible causes:

- For PIMG/TIMG integrations, certain phone systems require that Unity Connection use port memory to turn off MWIs so that the same port is used for turning off an MWI that was used for turning on the MWI. See the "Confirm that Unity Connection Uses Port Memory (PIMG/TIMG Integrations)" section on page 15-4.

- For PIMG/TIMG integrations, if the phone system requires port memory, one or more of the ports used to set MWIs were deleted or were reconfigured not to set MWIs. You must have the phone system turn off all MWIs, then have Unity Connection resynchronize all MWIs.

To avoid this problem when deleting or reconfiguring MWI ports not to set MWIs, see the "Deleting or Reconfiguring MWI Ports When Port Memory is Used (PIMG/TIMG Integrations)" section on page 15-5.

Confirm that Unity Connection Uses Port Memory (PIMG/TIMG Integrations)

When MWIs turn on but do not turn off, the cause may be port memory. For Avaya, Rolm, and Siemens Hicom phone system integrations, Cisco Unity Connection must use the same port for turning off an MWI that was used for turning on the MWI. When Unity Connection is integrated with one of these phone systems and uses a different port for turning off an MWI, the MWI request for turning off the MWI fails.

Note This problem does not apply to PIMG/TIMG serial integrations.

Procedure

Step 1 In Cisco Unity Connection Administration, expand **Telephony Integrations** > **and** select **Phone System**.

Step 2 On the Search Phone Systems page, select the name of the phone system.

Step 3 On the Phone System Basics page, under Message Waiting Indicators, confirm that the **Use Same Port for Enabling and Disabling MWIs** check box is checked and select **Save**.

Deleting or Reconfiguring MWI Ports When Port Memory is Used (PIMG/TIMG Integrations)

If Unity Connection must use the same port for turning off an MWI that was used for turning on the MWI, and you want to delete an MWI port or reconfigure an MWI port not to set MWIs, do the applicable procedure.

Procedure

Step 1 In Cisco Unity Connection Administration, expand **Telephony Integrations** and select **Phone System**. On the Search Phone Systems page, select the name of the phone system.

Step 2 On the Phone System Basics page, under Message Waiting Indicators, check the **Force All MWIs Off for This Phone System** check box and select **Save**. All MWIs for the phone system are turned off.

Step 3 In the left pane, select **Port**.

Step 4 On the Search Ports page, check the check boxes of the MWI ports that you want to delete and select **Delete Selected**.

Step 5 In the left pane, select **Phone System**. On the Search Phone Systems page, select the name of the phone system.

Step 6 On the Phone System Basics page, under Message Waiting Indicators, uncheck the **Force All MWIs Off for This Phone System** check box and select **Save**.

Step 7 To the right of Synchronize All MWIs on This Phone System, select **Run**. All MWIs for the phone system are synchronized.

Reconfiguring MWI Ports When Port Memory is Used (PIMG/TIMG Integrations)

Procedure

Step 1 In Cisco Unity Connection Administration, expand **Telephony Integrations** > **and** select **Phone System**. On the Search Phone Systems page, select the name of the phone system.

Step 2 On the Phone System Basics page, under Message Waiting Indicators, check the **Force All MWIs Off for This Phone System** check box and select **Save**. All MWIs for the phone system are turned off.

Step 3 In the left pane, select **Port**. On the Search Ports page, select the display name of the first MWI port that you want to reconfigure not to set MWIs.

Step 4 On the Port Basics page, under Port Behavior, enter the applicable settings and select **Save**.

Step 5 If there are more MWI ports that you want to reconfigure not to set MWIs, select **Next**. Otherwise, skip to Step 7.

Step 6 Repeat Step 4 and Step 5 for all remaining MWI ports that you want to configure not to set MWIs.

Step 7 In the left pane, select **Phone System**.

Step 8 On the Search Phone Systems page, select the name of the phone system.

Step 9 On the Phone System Basics page, under Message Waiting Indicators, uncheck the **Force All MWIs Off for This Phone System** check box and select **Save**.

Step 10 To the right of Synchronize All MWIs on This Phone System, select **Run**. All MWIs for the phone system are synchronized.

Delay for MWIs to Turn On or Off

Use the troubleshooting information in this section if there is a delay for MWIs to turn on or off. See the following possible causes:

- If MWIs are being synchronized for a phone system integration, this may result in delayed MWIs for messages. This is due to the additional MWI requests that are being processed.
- The number of ports assigned to handle MWI requests is insufficient. To evaluate the current MWI port activity, see the "Determining the MWI Port Activity" section on page 15-6.

For systems that handle a large volume of calls, you may need to install additional ports.

- *(Cisco Unified CM SCCP integrations only)* If there are two or more port groups in the phone system integration, the port groups may not all be configured correctly for MWIs. See the "Configuring the MWI On and Off Extensions for Port Groups (SCCP Integrations Only)" section on page 15-6.

Determining the MWI Port Activity

Procedure

Step 1 In Cisco Unity Connection Serviceability, on the Tools menu, select **Reports**.

Step 2 On the Serviceability Reports page, select **Port Activity Report**.

Step 3 On the Port Activity Report page, select the applicable options for the report.

Step 4 Select **Generate Report**.

Configuring the MWI On and Off Extensions for Port Groups (SCCP Integrations Only)

For Cisco Unified CM SCCP integrations, the phone system integration may have two or more port groups, one of which might be missing the MWI on and off extension settings.

1. In Cisco Unity Connection Administration, expand **Telephony Integrations**, then select **Port Group**. On the Search Port Groups page, select the name of the first port group for the SCCP integration.
2. On the Port Group Basics page, under Message Waiting Indicator Settings, in the MWI On Extension field, confirm that the extension for turning on MWIs is entered. If the field is blank, enter the MWI On extension.
3. In the MWI Off Extension field, confirm that the extension for turning off MWIs is entered. If the field is blank, enter the MWI Off extension and select **Save**.
4. Select **Next**.
5. Repeat Step 2 through Step 3 for the remaining port groups in the SCCP integration.

No Message Count Sent on Phone When MWI is On

For Cisco Unified CM integrations, Unity Connection typically provides a message count when the user signs in by phone. If the message count is not given, message counts have not been enabled for new messages or for the type of new message that is in the user voice mailbox. For example, if message counts are enabled only for voice messages, no message count is given when a new email or fax message arrives, even if the MWI is on.

Enabling Message Counts for the Applicable New Messages

SUMMARY STEPS

1. In Cisco Unity Connection Administration, expand **Users** > **and** select **Users**. On the Search Users page, select the alias of the applicable user.
2. On the Edit User Basics page, on the Edit menu, select **Playback Message Settings**.
3. On the Playback Message Settings page, under For New Messages, Play, check the applicable check boxes:
4. Select **Save**.

DETAILED STEPS

Procedure

Step 1 In Cisco Unity Connection Administration, expand **Users** > **and** select **Users**. On the Search Users page, select the alias of the applicable user.

Step 2 On the Edit User Basics page, on the Edit menu, select **Playback Message Settings**.

Step 3 On the Playback Message Settings page, under For New Messages, Play, check the applicable check boxes:

- **Message Count Totals**—Unity Connection announces the total number of messages that are marked new, including voice, email, and fax messages.
- **Voice Message Counts**—Unity Connection announces the total number of voice messages that are marked new.
- **Email Message Counts**—Unity Connection announces the total number of email messages that are marked new.
- **Fax Message Counts**—Unity Connection announces the total number of fax messages that are marked new.
- **Receipt Message Counts**—Unity Connection announces the total number of receipts that are marked new.

Step 4 Select **Save**.